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Job No.: CTCE/BBMP/W.No.12/KRIDL/CEMENT/2011-12 Date: 24.02.2012

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	:	Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	:	TM(W)/KRIDL/BBMP/WKS/2011-12 /2067
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-1989
1	a) Initial Setting Time	IS-4031 (Part -5)	156 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	482 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	2 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	31.00 %	-

Information is furnished by the Agency.

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Job No.: CTCE/BBMP/W.No.12/KRIDL/SAND/2011-12 24.02.2012

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.

Reference : TM(W)/KRIDL/BBMP/WKS/2011-12 /2067

Date of Testing : 24.02.2012

Material : Sand Total Wt. of Aggregates in gms 2000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	53	2.65	2.65	97.4	90-100
2.36	256	12.80	15.45	84.6	75-100
1.18	397	19.85	35.30	64.7	55-90
600 Micron	498	24.90	60.20	39.8	35-59
300 Micron	512	25.60	85.80	14.2	8-30
150 Micron	158	7.90	93.70	6.3	0-10

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Job No.: CTCE/BBMP/W.No.12/KRIDL/AGG/2011-12 24.02.2012

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.

Reference : TM(W)/KRIDL/BBMP/WKS/2011-12 /2067

Date of Testing : 24.02.2012

Material : 40mm Aggregates

Total Wt. of Aggregates in gms 20000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	772	3.86	3.86	96.14	95-100
20	11602	58.01	61.87	38.13	30-70
10	5327	26.64	88.51	11.50	10-35
4.75	1896	9.48	97.99	2.02	0-5

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Job No.: CTCE/BBMP/W.No.12/KRIDL/STEEL/2011-12 28.02.2012

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
Name of the Work	:	Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
Reference	:	TM(W)/KRIDL/BBMP/WKS/2011-12 /2067
Date of Test	:	28.02.2012
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	12	0.895	524	549	13.45	O.K	O.K
2	16	1.596	532	552	14.10	O.K	O.K

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Job No.: CTCE/BBMP/W.No.12/KRIDL/CUBE/2011-12 30.03.2012

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of the work : Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.

Reference : TM(W)/KRIDL/BBMP/WKS/2011-12 /2067

Sample ID : Culvert Deck Slab Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.03.2012	30.03.2012	8.374	505.4	22.46
2	02.03.2012	30.03.2012	8.115	472.8	21.01
3	02.03.2012	30.03.2012	8.269	489.6	21.76

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BM/Bitumen/2011-12 06.03.2012

BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS MACADAM MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	TM(W)/KRIDL/BBMP/WKS/2011-12 /2067
SAMPLE I/D	Pipe Line Road Junction to Abbigere Village, Abbigere Main Road
DATE OF TESTING	06.03.2012

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	483.5	484.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	16.5	15.50
7. Bitumen content in %	3.30	3.10
8. Average	3.20	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
26.5	0	0	0	100	100
19	35.8	7.40	7.40	92.60	90-100
13.2	173.4	35.86	43.27	56.73	56-88
4.75	171.8	35.53	78.80	21.20	16-36
2.36	43.2	8.93	87.74	12.26	4-19
0.3	33.49	6.93	94.66	5.34	2-10
0.075	7.29	1.51	96.17	3.83	0-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
26.5	0	0	0	100	100
19	22.5	4.50	4.50	95.50	90-100
13.2	159.8	31.96	36.46	63.54	56-88
4.75	195.7	39.14	75.60	24.40	16-36
2.36	76.3	15.26	90.86	9.14	4-19
0.3	13.41	2.68	93.54	6.46	2-10
0.075	8.12	1.62	95.17	4.83	0-8

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Bitumen/2011-12 07.03.2012

BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	Asphalting from Pipe Line Road Junction to Abbigere Village, Abbigere Main Road in Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	TM(W)/KRIDL/BBMP/WKS/2011-12 /2067
SAMPLE I/D	Pipe Line Road Junction to Abbigere Village, Abbigere Main Road
DATE OF TESTING	07.03.2012

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Sample 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475.5	476
3. Weight of Asphalt and Mineral matter Extracted, g	24.5	24
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g	-	-
6. Weight of Bitumen Extracted, g. (corrected)	24.5	24
7. Bitumen content in %	5.15	5.04
8. Average	**5.10**	

GRADATION AFTER EXTRACTION

TABLE - 1

Sieve size in mm	Percent Passing, %		Specified Limits as per MORTH specification table 500-4 (Grading-2)
	Sample 1	Sample 2	
19	100.00	100.00	100
13.2	85.74	88.74	79-100
9.5	79.62	80.26	70-88
4.75	63.25	64.58	53-71
2.36	55.48	53.49	42-58
1.18	43.21	42.18	34-48
0.6	34.59	33.51	26-38
0.3	23.19	22.19	18-28
0.15	16.27	15.84	12-20
0.075	6.58	7.85	4-10

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